



TECHNICAL DATA SHEET

MDT-A

Base material

Polyolefin with hot melt adhesive

Color

Black



Typical Properties

Physical	Value	Standard	Test Method
Shrink ratio	Up to 4.5:1		
Tensile strength	19 N/mm ² min.	-	IEC 60684-2-19
Elongation at break	500 % min.	-	IEC 60684-2-19
Longitudinal change	+0% to -10 %	-	IEC 60684-2-9
Concentricity	50 % min.	-	IEC 60684-2-3
Secant Modulus	100 N/mm ²	-	IEC 60684-2-37
Relative Density	1.01 g/cm ³	-	IEC 60684-2-4
Shore Hardness	92 Shore A		ASTM D-2240

Thermal	Value	Standard	Test Method
Continuous Operating Temperature	-35°C to +130°C (1)	-	IEC 60684-2-37
Shrink Temperature	135°C min. 280 °C max.		
Heat Shock 200 °C / 4 hrs		-	IEC 60684-2-6
Tensile strength	N/mm ² min.	-	IEC 60684-2-19
Elongation at break	% min.	-	IEC 60684-2-19
Heat Aging 150 °C / 168 hrs		-	IEC 60684-2-39
Elongation at break	450 % min.	-	IEC 60684-2-19
Low Temperature Flexibility	No cracking after bending	-	IEC 60684-2-14
Copper Corrosion	No corrosion	-	IEC 60684-2-33
Flammability	Not self extinguishing	-	IEC 60684-2-26

Electrical	Value	Standard	Test Method
Dielectric Strength	110 kV/cm	-	IEC 60684-2-21
Volume resistivity	1*10 ¹³ Ohm.cm	-	IEC 60684-2-23
Track Resistance	2.25 kV		ASTM D 2303

Chemical	Value	Standard	Test Method
Chemical Resistance	Good	-	IEC 60684-2-36
Sealing	IP 68	IEC529	VDE 0278

Environmental	Value	Standard	Test Method
Halogen free	Yes	BS 6853	N/a
RoHS compliant	Yes	2002/95/EEC	N/a
Decabromo diphenylether (PBDE) Free	Yes		N/a

Technical Information provided consists of typical product data and should not be used for specification purposes.
Unless otherwise specified in the test method, all tests are performed at room temperature.

(1) Outer wall only

Important note to the purchaser.

All statements, technical information and recommendations contained herein are based on tests 3M believes to be reliable, but their accuracy and completeness are not guaranteed.

The user shall be responsible for determining the suitability of the products for his particular application.

To discuss your application requirements please contact your representative

Issue date 12/4/2006
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Page 1 of 2



TECHNICAL DATA SHEET MDT-A

Documentation

Lloyd's Register of Shipping Certificate 95/30032
Germanische Lloyd Certificate 93863-86HH
Bureau Veritas Certificate 04899/C0
IEC 60684-3-247



Product Guide - Table 1

Part Number	Cable cross-section (4 cores) mm ²	Application range Diameter mm	Expanded ID (min.) mm.	Recovered ID (max.) mm.	Total Recovered Wall Thickness (nominal) mm.	Recovered Adhesive Wall Thickness (nominal) mm.
12.0	6 - 25	3.6 – 9.6	12.0	3.0	2.3	0.7
19.0	16 - 50	6.8 – 15.2	19.0	6.0	3.2	0.8
27.0	25 – 95	9.0 – 21.6	27.0	8.0	3.3	0.8
32.0	35 – 150	9.0 – 25.6	32.0	7.5	3.3	0.8
38.0	95 - 300	14 – 30	38.0	12.0	3.3	0.8
50.0		22 – 40	50.0	18.0	3.3	0.8
70.0		31 – 56	70.0	26.0	3.3	0.8
90.0		43 – 72	90.0	36.0	3.3	0.8
120.0		48 – 96	120.0	40.0	3.3	0.8

Storage Conditions

Temperature: min. -50 °C
max. +50 °C

Moisture: max. 75 %

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Page 2 of 2